

Title (en)

Microcontroller for controlling bidirectional transfer of data between a central control unit and a plurality of external units.

Title (de)

Mikrosteuereinrichtung zur Steuerung der bidirektionalen Datenübertragung zwischen einer zentralen Steuereinheit und mehreren externen Einheiten.

Title (fr)

Dispositif de microcommande pour commander le transfer bidirectionnel entre une unité de contrôle centrale et une pluralité d'unités externes.

Publication

EP 0006472 A1 19800109 (EN)

Application

EP 79101705 A 19790601

Priority

US 92114778 A 19780630

Abstract (en)

[origin: ES482048A1] A microcontroller having a novel addressing arrangement for addressing a storage means containing microinstructions is disclosed. The microcontroller has a fixed machine cycle time for executing each instruction and is arranged to fetch the next instruction during the execution of the current instruction. Branch, conditional branch and non-branch type of instructions are executed. The means for executing instructions is characterized by a plurality of instruction addressable data sources which are selectively connected to the input of the ALU register during the input phase of the machine cycle and a plurality of instruction addressable data destinations which are selectively connected to the output of the ALU register during the output phase of the machine cycle. The means for fetching the next instruction is characterized by a plurality of partial address generators, one of which is the ALU register employed to transfer data from a source to a destination. Control means responsive to the contents of an instruction register decoder supplies appropriate control signals at predetermined times to cause the transfer of address signals from the partial address generators to the address register to initiate readout of the next instruction from the instruction storage means during the execution of the current instruction.

IPC 1-7

G06F 13/00; **G06F 3/04**; **G06F 9/06**

IPC 8 full level

G06F 3/06 (2006.01); **G06F 9/22** (2006.01); **G06F 9/38** (2006.01); **G06F 13/12** (2006.01)

CPC (source: EP US)

G06F 13/124 (2013.01 - EP US)

Citation (search report)

- DE 2544945 A1 19760408 - FAIRCHILD CAMERA INSTR CO
- DE 2752299 A1 19780601 - DATA GENERAL CORP
- DE 2612621 A1 19761209 - INT STANDARD ELECTRIC CORP
- US 4104731 A 19780801 - GRUDOWSKI RAYMOND A, et al
- DD 132215 A1 19780906 - LOGISCH HELMUT
- DE 1524155 A1 19700702 - IBM

Cited by

GB2117944A

Designated contracting state (EPC)

BE CH DE FR GB IT NL SE

DOCDB simple family (publication)

EP 0006472 A1 19800109; **EP 0006472 B1 19821215**; AU 4660679 A 19800103; AU 521818 B2 19820429; BR 7903492 A 19800205; CA 1121068 A 19820330; DE 2964257 D1 19830120; ES 482048 A1 19800216; JP S5528195 A 19800228; JP S6148736 B2 19861025; JP S621028 A 19870107; JP S6349241 B2 19881004; US 4276595 A 19810630

DOCDB simple family (application)

EP 79101705 A 19790601; AU 4660679 A 19790502; BR 7903492 A 19790604; CA 330521 A 19790625; DE 2964257 T 19790601; ES 482048 A 19790629; JP 5716686 A 19860317; JP 7577079 A 19790618; US 92114778 A 19780630